



DEPARTMENT OF ENERGY

Amended Notice of Intent to Revise the Scope of an Environmental Impact Statement for the Recapitalization of Infrastructure Supporting Naval Spent Nuclear Fuel at the Idaho National Laboratory

AGENCY: Department of Energy

ACTION: Amended Notice of Intent to Revise the Scope of an Environmental Impact Statement

SUMMARY:

Pursuant to the National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR part 1500-1508), and the Department of Energy (DOE) implementing procedures (10 CFR 1021), the DOE Naval Nuclear Propulsion Program (NNPP) announces its intent to revise the scope to the Environmental Impact Statement (EIS) for the Recapitalization of Naval Spent Nuclear Fuel Handling and Examination Facilities at the Idaho National Laboratory (INL). The NNPP issued its Notice of Intent (NOI) to prepare the EIS for the Recapitalization of Naval Spent Nuclear Fuel Handling and Examination on July 20, 2010 (75 FR 42082).

DATES:

The NNPP invites interested parties to comment on the revised scope of the EIS. NNPP will consider all comments received by June 11, 2012, and to the extent practical comments received after that date, in the preparation of the EIS.

ADDRESSES:

Written comments on the revised scope of the EIS may be submitted by mailing to:

Ms. Samantha O'Hara (08U-Naval Reactors)

Naval Sea Systems Command

1240 Isaac Hull Avenue, SE

Stop 8036

Washington Navy Yard, DC 20376-8036

Comments provided by E-Mail should be submitted to ecfrecapitalization@unnpp.gov.

FOR FURTHER INFORMATION CONTACT:

For further information about this project, contact Ms. Samantha O'Hara, as described above.

SUPPLEMENTARY INFORMATION:

The NNPP is responsible for all aspects of U.S. Navy nuclear power and propulsion. These responsibilities include design, maintenance, and safe operation of nuclear propulsion systems throughout their operational life cycles. A crucial component of this mission, naval spent nuclear fuel handling, occurs at the end of a nuclear propulsion system's useful life. Once a naval nuclear core is depleted, the NNPP is responsible for removal of the spent nuclear fuel through

a defueling or refueling operation. Both operations remove the spent nuclear fuel from a reactor core, but a refueling operation also involves installing new fuel into the reactor core, allowing the nuclear-powered ship to be redeployed into the U.S. Navy fleet. After the naval spent nuclear fuel has been removed from an aircraft carrier or submarine, NNPP spent fuel handling includes the subsequent transfer, preparation, and packaging required for dry storage pending transportation of the fuel to a national geologic repository or interim storage site.

The NNPP ensures that naval spent nuclear fuel handling is performed in a safe and environmentally responsible manner in accordance with 50 U.S.C. 2406, 2511 (codifying Executive Order 12344). Nuclear fuel handling is an intricate and intensive process requiring a complex infrastructure. Naval spent nuclear fuel handling includes the transfer of spent nuclear fuel removed from a reactor to the Expanded Core Facility (ECF) at the Naval Reactors Facility (NRF) at the INL, where it is received, unloaded, prepared, and packaged for disposal.

The NNPP is proposing to recapitalize the existing ECF infrastructure at the INL. The purpose of the proposed action is to ensure the continued availability of the infrastructure needed to support the transfer, handling, examination, and packaging of naval spent nuclear fuel removed from nuclear-powered aircraft carriers and submarines, as well as from land-based prototype reactors for at least the next 40 years. This action is needed because, although the ECF at the NRF, where this work is currently supported, continues to be maintained and operated in a safe and environmentally responsible manner, a significant portion of the ECF infrastructure has been in service for over 50 years. Deterioration of the ECF infrastructure could immediately and profoundly impact the NNPP mission, including the NNPP's ability to support refueling and defueling of nuclear powered submarines and aircraft carriers. The ECF capabilities to transfer, prepare, examine, and package naval spent nuclear fuel, and other irradiated materials are vital to the NNPP's mission of maintaining the reliable operation of the naval nuclear-powered fleet and developing militarily effective nuclear propulsion plants.

Consistent with the Record of Decision for the April 1995 *DOE Programmatic EIS for Spent Nuclear Fuel Management (DOE/EIS-0203-F)*, naval spent nuclear fuel is shipped by rail from shipyards and prototype facilities to NRF for examination and processing. After processing, naval spent nuclear fuel is transferred into dry storage containers and placed into temporary storage at NRF, prior to off-site transfer consistent with the Record of Decision for the November 1996 *Navy EIS for a Container System for Management of Naval Spent Nuclear Fuel (DOE/EIS-0251)*. Ongoing efforts to sustain the infrastructure needed to transfer, prepare, examine, and package naval spent nuclear fuel will preserve these essential capabilities and ensure that the NNPP high standards for protecting the public and the environment continue to be met. Facility age, however, is expected to cause a growing maintenance burden and increase the likelihood of unacceptable workflow interruptions that could adversely impact the fleet.

The NNPP proposes to recapitalize the infrastructure for transferring, preparing, examining, and packaging naval spent nuclear fuel and other irradiated materials, to ensure these capabilities are maintained for the vital NNPP mission of supporting the naval nuclear-powered fleet. The recapitalization will be carried out as two projects. The first project will be the Spent Fuel Handling Recapitalization Project; the second project will be the Examination Recapitalization Project. The NNPP was initially pursuing two recapitalization projects in the same time frame; however, since the initiation of the NEPA process, the project schedules have changed such that the Spent Fuel Handling Recapitalization Project has progressed further than the Examination Recapitalization Project. Preparing one EIS that includes both projects would require decisions about the Examination Recapitalization Project too early in the design process prior to having sufficient information to fully analyze the environmental impacts of the project. Additionally, funding uncertainties have made the timing of the Examination Recapitalization Project speculative in nature. To ensure an EIS is completed in support of the Navy's need for the Spent Fuel Handling Recapitalization Project, it is necessary to reduce the scope of the EIS to cover only the Spent Fuel Handling Recapitalization Project. The proposed Examination Recapitalization Project will be considered in the cumulative impacts section of the EIS along

with other reasonably foreseeable projects on the INL. A separate document will be prepared in accordance with NEPA for the Examination Recapitalization Project once this project has been more clearly defined.

The EIS will consider the environmental effects related to the Spent Fuel Handling Recapitalization Project. The alternatives being evaluated have been revised to remove aspects related to an Examination Recapitalization Project and to address public comments received during initial EIS scoping. The NNPP will evaluate building a new facility at two potential sites on the NRF, an ECF Overhaul Alternative, and a No Action Alternative:

- Alternative 1 – Construct and operate a new facility for spent fuel handling capabilities at one of two potential locations at the NRF on the INL.
- Alternative 2 – Overhaul the spent fuel handling capabilities of the ECF at NRF by implementing major infrastructure and water pool refurbishment projects while performing corrective maintenance and repair actions as necessary.
- Alternative 3 (No Action) – Maintain the spent fuel handling capabilities of the ECF by continuing to use the current ECF infrastructure while performing corrective maintenance and repairs necessary to keep the infrastructure in good working order (i.e., actions sufficient to sustain the proper functioning of structures, systems, and components).

The NNPP proposes to address the issues listed below when considering the potential impacts of the proposed alternatives in the EIS. This list is presented to facilitate public comment during the scoping period and is not intended to be comprehensive, or to imply any predetermination of impacts. Issues include:

- Potential impacts of emissions on air and water quality.

- Potential impacts on plants, animals, and their habitats, including species that are listed by either State or Federal government as threatened, endangered, or of special concern.
- Potential impacts from postulated accidents, as well as potential impacts from acts of terrorism or sabotage.
- Potential effects on the public health from exposure to hazardous materials or radiological releases under routine operations.
- Potential safety and health impacts to workers.
- Impacts on cultural resources, such as historic, archeological, and Native American culturally important sites.
- Socioeconomic impacts to the potentially affected communities.
- Compliance with applicable Federal and state regulations.
- Potential disproportionately high and adverse effects on low-income and minority populations (environmental justice).
- Cumulative impacts.

NEPA implementing regulations require an early and open process for determining the scope of an EIS and for identifying the significant issues related to the proposed action. Accordingly, NNPP invites Federal agencies; Tribal, State, and local governments; and the general public to comment on the revised scope of the EIS including identification of reasonable alternatives and specific issues that should be addressed. All public comments received as described above will be considered during the development of the EIS.

Issued in Washington, DC on 04 May 2012.

John M. McKenzie
 Director, Regulatory Affairs
 Naval Nuclear Propulsion Program

